Precipitation over northeastern New Mexico, April 29–May 3, 1914.

Station.	County.	April.		May.			Total.
		29	30	1	2	3	
							Inches.
Aurora	Colfax	1.14	1.20	0.88	0	0	3.22
Black Lake	do	(*)	1.70	0.93	0	0	2.63
Cimarron (near)	do	2.04	1.54	0.04	0	0	3.62
Dawson	do	0.28	1.18	1.56	0	0	3.02
Elizabethtown	do	0	1.10	0.80	0	0	1.90
Johnson's Park	do	0.04	1.70	2.10	0.18	0.01	4.03
Maxwell (near)	do	0	3.08	1.28	0	0	4.36
Miami	do	0.27	0	2.40	0	0	2.67
Raton	do	0.75	1.20	0.42	0.53	0	2.90
Springer	do	0.05	0.65	1.30	0	0	2.00
Taylor	do	0.11	0.53	1.33	0	0	1.97
Vermejo Park	do	0.05	2.00	0.73	0	0	2.78
Abbott	Mora	0.07	1.97	0.52	0	0	2.56
Chacon	do	(*)	2.11	0.75	0	0	3.06
Fort Union	do	0	0.40	0.97	0	0	1.37
Hoosier ranch	do	T.	6.08	2.25	0	0	8.33
Johnson's ranch	do	0.40	4.75	1.85	0	0	7.00
Mills (near)	do	0	3.00	1.90	0	0	4.90
Palo Verde	do	0.08	4.35	2.55	0	0	6.98
Pleasant View	do	0.40	5.48	3.05	0	0	8.93
Roy	do	0	5.00	2.40	0	0	7.40
Solano	do	T.	3.90	3.75	0	0	7.65
Wagon Mound (near)	do	0.05	0.58	1.25	0	0	1.88
Bell ranch	San Miguel	0	3.01	3.80	0	0	6.81
Cabeza	do	0	2.75	2.56	0	0	5.31
Campana	do	(*)	2.20	3.95	0	0	6.15
Rociada	do	0	1.83	0.64	0	0	2.47
Trementina	do	(*)	2.60	1.85	0	0	4.45
Cuervo	Guadalupe	0	2.00	2.50	0	0	4.50
Albert	Union	0.48	2.15	3.00	0	0	5.63
Clayton	do	(*)	6.20	3.35	0	0	9.55
Folsom	do	0.06	2.05	1.40	0	0	3.51
Hayden (near)	do	0.12	0.78	3.56	0.03	0	4.49
Pasamonte	do	1.57	4.15	0.64	0	0	6.36
Rosebud	do	1.10	3.54	0.10	0	0	4.74
Vance (near)	do	1.00	1.21	3.07	0	0	5.28
Kappus	Quay	0.55	1.80	1.30	0.20	0	3.85
Logan	do	0.05	2.00	3.63	0	0	5.68
Montoya	do	0	0.40	4.20	0	0	4.60
San Jon	do	0.33	0.85	1.18	T.	0	2.36
Tucumcari	do	(*)	1.60	0.33	0	0	1.93
Nara Visa	do	0.01	5.08	3.11	0	0	8.20

*Measurement included in next day.

THE ARKANSAS RIVER.

During May stages higher than usual occurred on a number of dates in the Arkansas River in Colorado. These high stages were in part due to temperature conditions favorable to uninterrupted melting of snow in the upper reaches during the latter part of April. But the principal cause of the prevalence of high water was the heavy rainfall, especially in the eastern part of Colorado. Several freshets occurred, but their duration was short and but little damage resulted, except from the freshet of May 1 and 2.

A tabulated statement of the rainfall on this watershed from April 29 to the end of May 3 is appended.

Daily precipitation, April 29 to May 3, inclusive, 1914, in watershed of the Arkansas in Colorado.

	Watershed.	April.		May.			Total.
		29	30	1	2	3	
							Inches.
Canon City	Arkansas	0.06	1.60	1.30	0.42	0.00	3.38
Colorado Springs	Fountain	1.35	2.03	0.54	0.00	0.07	3.99
Eads	Big Sandy	1.00	2.00	1.50	0.00	0.00	4.50
Florence	Arkansas	0.55	1.55	0.78	0.00	0.00	2.88
Freemont Experiment Station.	Fountain	0.42	0.91	0.71	0.21	0.00	2.25
Hamps	Big Sandy	0.30	1.75	0.77	0.03	0.02	2.87
Hoehne	Purgatoire	0.58	0.98	1.88	0.00	T.	3.44
Holly	Arkansas	0.52	1.62	0.96	0.00	0.00	3.10
La Junta	do	0.41	2.30	1.00	0.01	T.	3.72
Lake Moraine	Fountain	0.12	0.40	0.35	0.16	0.05	1.08
Lamar	Arkansas	0.18	0.77	3.30	0.00	0.00	4.25
La Veta Pass	do	0.00	0.98	0.00	0.00	T.	0.98
Limon	Big Sandy	0.25	1.48	0.70	0.00	T.	2.43
Madrid	Purgatoire	0.17	1.10	1.58	0.00	0.00	2.85
Maxey	Arkansas	1.00	2.00	4.10	0.00	0.00	7.10
Monument	Fountain	(*)	1.79	0.00	0.00	T.	1.79
North Lake	Purgatoire	0.06	2.76	0.90	0.00	0.12	3.84
Trinidad	do	0.35	0.91	1.70	T.	T.	2.96
Two Buttes Reservoir	Arkansas	0.20	1.05	2.79	0.00	.00	4.04
Yoder	do	0.16	1.61	0.43	0.04	0.06	2.29

*Measurement included in next day.

Flood of May 1 and 2.—The precipitation of April 30 and May 1 was excessive in many localities on the Arkansas watershed in the eastern part of the State. High stages occurred almost simultaneously on May 1 from Oxford Farmer's Dam, near Nepesta, eastward to the Kansas line. The flood subsided on May 3. East of La Junta the flooding of bottom lands resulted in much damage to farm lands, crops, live stock, bridges, and railroad property. The greatest damage occurred in the extreme eastern part of the State, where flood conditions were most pronounced. Timely warnings were issued for all high-water conditions.

On May 1, at 5 a. m., the river at Oxford Dam, near Nepesta, was 3.6 feet, or 0.4 below flood stage. At the same time the Purgatoire, a tributary joining the Arkansas above Fort Lyon, was rising rapidly. At 8 a. m. this river at Higbee was 8 feet, a rise of 6 feet in the preceding 24 hours. At the same time the Arkansas at Fort Lyon was 6.2 feet, or slightly above flood stage. At 8 a. m. the next day, May 2, the reading of this gage was 7 feet. Farther downstream the rise was more pronounced. At Amity Dam, near Prowers, on April 30, 1 foot of water was passing over the dam; in the evening of May 1 the depth of water passing over the dam was 5 feet, the maximum stage. By night of the 2d the river had fallen to 3 feet. The maximum discharge over the Amity Dam was estimated at 35,000 second-feet.

Flood in Fountain Creek in the vicinity of Pueblo, Colo., May 17–18.—During the night of May 17 a severe thunderstorm accompanied by heavy rainfall occurred in the vicinity of Fountain and Buttes, near the head of Fountain Creek, Colo. Flood conditions resulted in the area embraced by the Fountain watershed. Lowlands were flooded between Fountain and Pueblo, and the property loss was considerable. To the eastward of Pueblo only moderate river stages occurred in the Arkansas River from the Fountain freshet, and no material property damage resulted, except along the Fountain and in the vicinity of Pueblo. Traffic between Pueblo and Denver was suspended for the greater part of two days.

In connection with this flood warnings were issued for places to the east of Pueblo.

COLORADO RIVER, MAY, 1914.

In the upper reaches of the tributaries there were marked rises between the 8th and 12th; a steady flow was then maintained for the next seven days. High stages were general on the 24th and 25th, and practically the same heights were general again at the end of the month. In the San Juan the highest stage at Farmington, N. Mex., occurred on the 24th; in the Grand, at Fruita, on the 25th, and in the Green, at Elgin, Utah, on the 29th and 30th. At Topock, Ariz., near Needles, Cal., the maximum stage, 20.3 feet, occurred on the 31st, while at Yuma the maximum stage, 25.6 feet, occurred on the 29th and 30th.

MAY LAKE LEVELS.

By UNITED STATES LAKE SURVEY.

[Dated Detroit, Mich., June 2, 1914.]

The United States Lake Survey reports the stages of the Great Lakes for the month of May, 1914, as follows:

	Feet above mean sea level.
Superior	602.33
Michigan-Huron	580.32
Erie	572.91
Ontario	246.95

Lake Superior is 0.50 foot higher than last month, 0.26 foot higher than a year ago, 0.36 foot above the average stage of May of the last 10 years, 0.72 foot below the high stage of May, 1861, and 1.51 feet above the low stage of May, 1911. Average stages of the last 10 years indicate that the June level will be 0.3 foot higher.

Lakes Michigan-Huron are 0.26 foot higher than last month, 0.74 foot lower than a year ago, 0.46 foot below the average stage of May of the last 10 years, 3.20 feet below the high stage of May, 1886, and 0.76 foot above the low stage of May, 1896. Average stages of the last10 years indicate that the June level will be 0.3 foot higher.

Lake Erie is 0.81 foot higher than last month, 1.07 feet lower than a year ago, 0.06 foot above the average stage of May of the last 10 years, 1.51 feet below the high stage of May, 1862, 1.60 feet above the low stage of May, 1901. Average stages of the last 10 years indicate that the June level will be 0.2 foot higher.

Lake Ontario is 0.20 foot higher than last month, 1.02 feet lower than a year ago, 0.02 foot below the average stage of May of the last 10 years, 2 feet below the high stage of May, 1870, and 1.99 feet above the low stage of May, 1872. Average stages of the last 10 years indicate that the June level will be 0.2 foot higher.